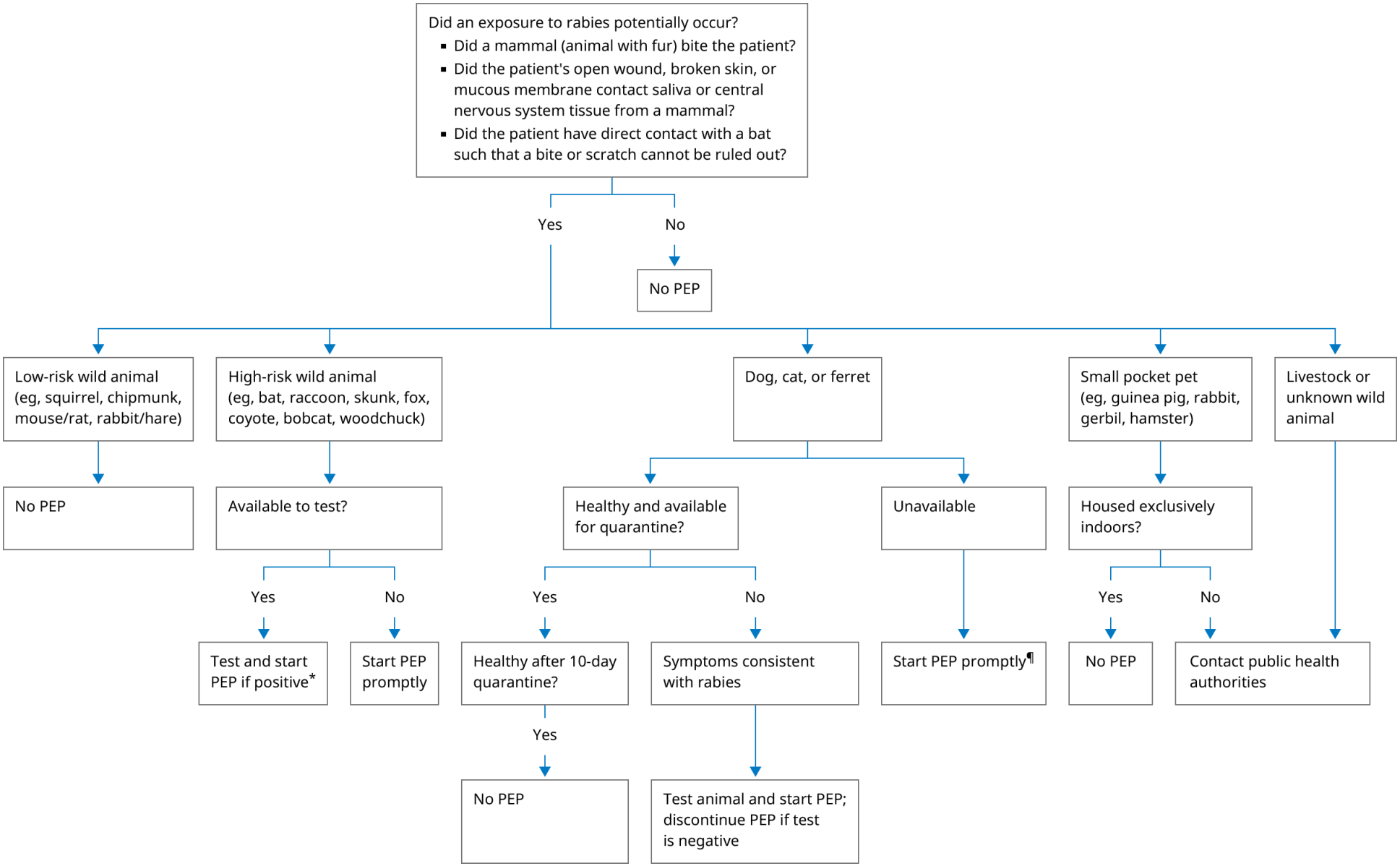
Rabies postexposure prophylaxis algorithm


Did an exposure to rabies potentially occur?
Did a mammal (animal with fur) bite the patient?
Did the patient's open wound, broken skin, or mucous membrane contact saliva or central nervous system tissue from a mammal?
Did the patient have direct contact with a bat such that a bite or scratch cannot be ruled out?
Yes
No
No PEP
Low-risk wild animal (eg, squirrel, chipmunk, mouse/rat, rabbit/hare)
High-risk wild animal (eg, bat, raccoon, skunk, fox, coyote, bobcat, woodchuck)
Dog, cat, or ferret
Small pocket pet (eg, guinea pig, rabbit, gerbil, hamster)
Livestock or unknown wild animal
No PEP
Available to test?
Healthy and available for quarantine?
Unavailable
Housed exclusively indoors?
Yes
No
Test and start PEP if positive*
Start PEP promptly
Healthy after 10-day quarantine?
Symptoms consistent with rabies
Start PEP promptly¶
No PEP
Contact public health authorities
No PEP
Test animal and start PEP; discontinue PEP if test is negative

PEP: postexposure prophylaxis.

* PEP should be initiated immediately in patients with severe bites to the head, neck, or trunk after an unprovoked attack from a high-risk animal. PEP can be discontinued if testing proves the animal was not rabid.

¶ In areas without an endemic, terrestrial strain of rabies (eg, dog, raccoon, skunk, fox, mongoose), contact local public health authorities for risk assessment.

Courtesy of Alfred DeMaria Jr, MD and the Massachusetts Department of Public Health.

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World Health Organization post-exposure rabies management

Category	PEP vaccine regimen	RIG	Comments
Category I – Touching or feeding animals, animal licks on intact skin	Not required	Not required	Exposed skin surfaces should be washed
Category II – Nibbling of uncovered skin, minor scratches or abrasions without bleeding	**Patients who have NOT been previously immunized:** Immediate vaccination with one of the following regimens: ▪ 2-sites ID on days 0, 3, and 7 ▪ 1-site IM on days 0, 3, 7, and between days 14 and 28 ▪ 2-sites IM on day 0 and 1-site IM on days 7 and 21	Not required	Exposed skin surfaces should be washed
	Patients who have been previously immunized:* ▪ 1-site ID on days 0 and 3 ▪ 4-sites ID on day 0 ▪ 1-site IM on days 0 and 3	Not required	Exposed skin surfaces should be washed
Category III – Single or multiple transdermal bites or scratches, contamination of mucous membrane or broken skin with saliva from animal licks, exposures due to direct contact with bats	**Patients who have NOT been previously immunized:** Immediate vaccination with one of the following regimens: ▪ 2-sites ID on days 0, 3, and 7 ▪ 1-site IM on days 0, 3, 7, and between days 14 and 28 ▪ 2-sites IM on day 0 and 1-site IM on days 7 and 21	RIG should be administered¶	Exposed skin surfaces should be washed
	Patients who have been previously immunized:* ▪ 1-site ID on days 0 and 3 ▪ 4-sites ID on day 0 ▪ 1-site IM on days 0 and 3	Not required	Exposed skin surfaces should be washed

This table describes regimens recommended by the World Health Organization (WHO) for post-exposure prophylaxis after a potential rabies exposure and are intended for areas

that may have limited resources. Refer to the topic that discusses rabies vaccine and immunoglobulin for information on regimens recommended by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP) for use in the United States, as well as information on vaccine and immunoglobulin formulations and administration.

Advisory Committee on Immunization Practices: ACIP; ID: intradermal; IM: intramuscular; PEP: post-exposure prophylaxis; RIG: rabies immune globulin.

* Previously immunized patients include those who have received pre-exposure prophylaxis and those who have completed a post-exposure vaccine regimen >3 months ago. Post-exposure prophylaxis (except for wound care) is not recommended for individuals who have a rabies exposure <3 months after completing a post-exposure vaccine series.

¶ RIG should be infiltrated into and around the wound. For small wounds, the maximal quantity that is anatomically feasible should be administered. Similarly, for bat bites or scratches, which are not readily visible, RIG should be injected around the site of the exposure to the degree that is anatomically feasible. The WHO no longer recommends injecting the remainder of the RIG IM at a site distant from the wound, which differs from ACIP recommendations in the United States. Refer to the topic that discusses rabies immunoglobulin for ACIP recommendations.

Adapted from: Ridder BA. Rabies vaccines: WHO position paper – April 2018. Weekly Epidemiological Record 2018; 93(16):201-220. Available at: https://www.who.int/publications/i/item/who-wer9316 (Accessed on December 10, 2021).

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